

ABSTRACT

According to an exemplary embodiment, a circuit arrangement includes a multi-mode bias circuit having a control voltage input, a mode control input for selecting between a linear mode and a saturation mode, and a bias output. The circuit arrangement further includes an amplifier having a bias input connected to the bias output of the multi-mode bias circuit, the amplifier having an RF input and an RF output. The multi-mode bias circuit causes the amplifier RF output power to be proportional to the RF input power when the mode control input selects the linear mode. Conversely, the multi-mode bias circuit causes the amplifier RF output power to be determined by the voltage at the control voltage input when the mode control input selects the saturation mode.